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Triassic Evolution of the Margin of the Yangtze Platform, Southwest Guizhou, China

The Triassic history of the vast, attached Yangtze platform (YP), as recorded near Hongyan, Guizhou, China, started with a retreat of the margin following a regional transgression initiated during the latest Permian. A condensed sequence of laminated lime mudstones spread across the Permian platform that was submerged to form a ramp. The platform-interior deposits are characterized by dolomitic shoaling-upward cycles. Carbonate breccia wedges within the basin may represent lowstand aprons corresponding to possible exposure surfaces.

During the Middle Triassic the YP developed a progressively steepening profile, whereas basinal deposits were fine siliciclastics. In the Anisian, massive *Tubiphytes* reefs rimmed the platform. Downlapping of foreslope clinoforms records slight progradation into a starved basin. Terrigenous clastics later overlapped the platform indicating possible reciprocal sedimentation of a lowland wedge.

During the Ladinian the YP rapidly aggraded, whilst basin-margin deposition was dominated by terrigenous turbidites and carbonate debris wedges shed from the platform. Following a major subaerial exposure that defines a possible sequence boundary, the platform margin further steepened during the late Ladinian (and earliest Carnian?) forming a high-relief profile. Platform-margin strata are shoaling-upward parasequences capped by minor exposure surfaces similar to interior dolomitic cycles, whereas coral-boundstone breccias at the basin-margin suggest extensive erosion of reefs.

During early Carnian the YP drowned and peritidal carbonates were covered by a thin interval of dark-gray lime mudstone, followed by a condensed sequence of black lime mudstones and laminated black shale with manganese nodules.